

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) In a wireless communication system supporting broadcast transmissions, a method for setting up transmission paths comprising the steps of:

determining a broadcast transmission range for a broadcast transmission within the system, wherein the broadcast transmission range identifies a first termination node for receiving the broadcast transmission;

building a multicast tree, wherein the step of building the multicast tree comprises the steps of:

~~from the first termination node to a broadcast source node, the multicast tree including the at least one router, wherein building the multicast tree further comprises initiating a registration chain including nodes from the first termination node to a the broadcast source node, wherein the first termination node and each successive node in the system approaching the broadcast source node in the registration chain registers with an adjacent node until reaching a node already registered with respect to the broadcast transmission; and~~

generating an Internet Protocol packet, the Internet Protocol packet having a multicast address; and

transmitting the Internet Protocol packet ~~a broadcast message~~ through the multicast tree over the transmission range.

2. (Canceled)

3. (Currently Amended) The method as in claim 1, wherein transmitting the broadcast message further comprises:

receiving the broadcast message at the broadcast source; and  
~~in response to receiving the broadcast message, the broadcast source~~

encapsulating the broadcast message in an Internet Protocol packet by the broadcast source to form a multicast Internet Protocol packet in response to receiving the broadcast message.

4. (Original) The method as in claim 3, wherein the multicast Internet Protocol packet identifies the broadcast source as a source and identifies a multicast Internet Protocol address as a destination.

5. (Currently Amended) The method of claim 4, wherein transmitting the broadcast message further comprises:

receiving the multicast Internet Protocol packet at the first termination node;

compressing the multicast Internet Protocol packet by the first termination node to form a compressed packet in response to receiving the multicast Internet Protocol packet ~~the first termination node compresses the multicast Internet Protocol packet to form a compressed packet;~~

encapsulating the compressed packet in an Internet Protocol packet to form a compressed packet, ~~further comprising changing of addressing the compressed packet~~ wherein the source of the compressed packet is altered to identify ~~comprises identifies~~ the first termination node and the destination of the compressed packet is altered to identify ~~identifies~~ a BSC IP address.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Previously Presented) An infrastructure element for generating Internet Protocol packets in a wireless transmission system supporting broadcast transmissions, the infrastructure element comprising:

means for determining a broadcast transmission range for a broadcast transmission within a wireless transmission system, wherein the broadcast range identifies a first termination node

for receiving the broadcast transmission, wherein the means for determining further comprises a means for building a multicast tree comprising initiating a registration chain including nodes from the first termination node to a broadcast source node, wherein the first termination node and each successive node in the system approaching the broadcast source node in the registration chain registers with an adjacent node until reaching a node already registered with respect to the broadcast transmission;

means for generating an Internet Protocol packet, the Internet Protocol packet having a multicast address; and

means for transmitting the Internet Protocol packet.

10. (Canceled)

11. (Canceled)

12. (Currently Amended) The system as in claim 29 ~~40~~, wherein the packet control function node processes the broadcast message and forwards the broadcast message to an intended recipient.

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Previously Presented) The method of claim 1, further comprising:
  - receiving the broadcast message as a multicast Internet Protocol packet at the first termination node, wherein the multicast Internet Protocol packet comprises a timestamp, wherein first termination node comprises an anchor BSC node;
  - wherein transmitting the broadcast message further comprises:
    - duplicating the multicast Internet Protocol packet at the anchor BSC node, wherein duplicating includes copying the timestamp;
    - transmitting the duplicate multicast Internet Protocol packet to at least one neighboring BSC node; and
    - transmitting the respective multicast Internet Protocol packet and the duplicate multicast Internet Protocol packet to a same mobile station by both the anchor BSC node and the at least one neighboring BSC node.
23. (Previously Presented) The method of claim 22, wherein transmitting the broadcast message further comprises transmitting a High Speed Broadcast Service (HSBS) channel multiplexed in a Time-Division Multiplex (TDM) fashion within a single broadcast channel.
24. (Previously Presented) The method of claim 1, wherein transmitting the broadcast message further comprises transmitting a High Speed Broadcast Service (HSBS) channel multiplexed in a Time-Division Multiplex (TDM) fashion within a single broadcast channel.
25. (Canceled)
26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Currently Amended) ~~The system of claim 10, further comprising:~~ A wireless communication system for processing broadcast transmissions in a wireless communication system, the system comprising:

a packet service data node adapted to receive a broadcast message comprising a multicast Internet Protocol address, wherein the packet service data node is operable to generate and transmit a multicast compressed framed packet based on the broadcast message, wherein the multicast compressed framed packet is addressed to the multicast Internet Protocol address;

a packet control function node adapted to receive the multicast compressed framed packet, wherein the packet control function node is operable to generate and transmit at least one unicast packet based on the multicast compressed framed packet, wherein the at least one unicast packet is addressed to at least one unicast address corresponding to a base station; and

a content source operable to transmit the broadcast message to the packet service data node based on a transmission range, wherein the transmission range identifies a first termination node for receiving the broadcast message, wherein the transmission range comprises a multicast tree built by initiating a registration chain from the first termination node to the content source, wherein the first termination node and each successive node in the registration chain approaching the content source registers with an adjacent node until reaching a node already registered with respect to the broadcast message.

30. (Currently Amended) The system of claim 29 ~~40~~, further comprising:

a timestamp associated with the multicast compressed framed packet ~~wherein the multicast compressed framed packet further comprises a timestamp;~~

wherein the packet control function node is further operable further transmit the multicast compressed framed packet; and

wherin the base station comprises an anchor BSC operable to receive either the at least one unicast packet or the multicast compressed framed packet, wherein the anchor BSC is further

operable to duplicate the multicast compressed framed packet, including copying the timestamp, and further operable to transmit the duplicate multicast compressed framed packet;

at least one neighboring BSC node operable to receive the duplicate multicast compressed framed packet; and

wherein both the anchor BSC node and the at least one neighboring BSC node are operable to transmit the respective multicast ~~compressed framed Internet Protocol~~ packet and the duplicate multicast ~~compressed Internet Protocol~~ packet to a same mobile station.

31. (Previously Presented) The system of claim 30, wherein the broadcast message further comprises a High Speed Broadcast Service (HSBS) channel multiplexed in a Time-Division Multiplex (TDM) fashion within a single broadcast channel.

32. (Previously Presented) ~~The system of claim 10~~ A wireless communication system for processing broadcast transmissions in a wireless communication system, the system comprising:

a packet service data node adapted to receive a broadcast message comprising a multicast Internet Protocol address, wherein the packet service data node is operable to generate and transmit a multicast compressed framed packet based on the broadcast message, wherein the multicast compressed framed packet is addressed to the multicast Internet Protocol address; and

a packet control function node adapted to receive the multicast compressed framed packet, wherein the packet control function node is operable to generate and transmit at least one unicast packet based on the multicast compressed framed packet, wherein the at least one unicast packet is addressed to at least one unicast address corresponding to a base station;

wherein the broadcast message further comprises a High Speed Broadcast Service (HSBS) channel multiplexed in a Time-Division Multiplex (TDM) fashion within a single broadcast channel.